

Responsibilities of a Principal Investigator

As the group leader, you have overall responsibility for the design, administration, conduct and reporting of research projects. Your approach towards research practice will determine whether your team operates in a healthy or a toxic research environment.

1 Research and Career Success

- Nurture young researchers in your team and practice gradual continuous improvement through training and mentoring.
- Avoid unhealthy competition and encourage collaboration.
- Manage expectations around research career pathway and reassure your team that leaving research is not considered to be a failure.



Words describing the ideal Research Culture (based on the 2020 Wellcome Trust and ARMA reports)

Inspiring
Ambitious
Flexible
Open
Funded
Collaborative
Fair
Innovative
Supportive
Inclusive
Quality
Balanced
Diverse
Collegiate
Rewarding
Friendly
Secure
Rigorous
Transparent
Nurturing
Creative
Integrity

2 Local Research Environment

- Promote ethical conduct of research, ensure care and respect within your team and beyond.
- Have the right people in the correct roles, guard against problems and questionable practices through education, training and adhering to guidance on good practice.
- Encourage inclusivity during open group discussions and listen to diversified opinions without bias to avoid the prejudice that leads to stereotyping.
- Be a support pillar for the mental health and wellbeing of your team.

3 Research Integrity and Ethics

- Encourage the dissemination of negative or null results as these contribute to knowledge.
- Regularly assess whether your research design and methodology are appropriate, beneficial and legal.
- Foster trust, respect and honesty but also critically review all research data, materials or information.
- Take a positive approach to compliance and promote integrity by ensuring standards and expectations are understood by team members.
- Support supervision and management training, good governance and timely, targeted communication to enhance research integrity.

4 Supervision

- Avoid hierarchical abuse of power, exploitation, and harassment.
- Critically reflect on your own behaviour and continuously develop your interpersonal skills, mentorship and leadership abilities.
- Balance your approach and empower your team.
- Be open to reverse mentoring, give recognition to supervision by group members, and support them through mentoring, education and training.
- Teach your team how to perform quality peer review; give credit to those who peer review.

5 Support For You

- Expect explicit organisational support with good infrastructure that include:
 - Clear guidance and policies, support from central research integrity, ethics and governance teams, integrity champions and advisors at the local level;
 - Commitment to the Concordat to Support Research Integrity;
 - An environment that facilitates the highest standards of academic rigour, gives recognition and value to your contributions to research, ensures integrated training and professional development programmes with sufficient structures in place to measure performance;
 - Colleagues, welfare and wellbeing advisors who support your mental and physical health.

Research Design and Conduct

Follow guidance from your organisation or UKRIO's Code of Practice for Research.

Create a dissemination plan in accordance with open research practice and trusted research guidelines.

Do not commence research until all legal agreements and ethical approvals are in place for the project.

Questionable Research Practices

These are very common and often unconsciously accepted by research communities. Do not subscribe to these as they can act as stepping stones to research misconduct.

Understand reporting concerns and follow guidance from your organisation or UKRIO's Procedures for Handling Research Misconduct.

The Concordat to Support Research Integrity

- Honesty
- Rigour
- Accountability
- Care & Respect
- Transparency & Open Communication

Peer Review

When reviewing grants and research outputs, abide by the Concordat's principles. Pay attention to detail, beware of passive aggressive comments, be open minded and avoid the 'Matthew effect'.

Matthew Effect

Describes the situation in which those who begin in a position of relative advantage accrue greater incremental gains over those who begin at a position of relative disadvantage.